APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,203	01/25/2002	Roger T. Baird	10014605-1	3810

7590   03/18/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
HOANG, PHUONG N

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/056,203	BAIRD ET AL.
	Examiner	Art Unit	
	Phuong N. Hoang	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 January 2002</u>.

2a)☐ This action is **FINAL**.　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1 - 34</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1 - 34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some *　c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1 – 34 are pending for examination.

Claim Rejections - 35 USC § 101

2.   Claims 1 – 7, and 33 – 34 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

a.   Claims 1- 7 are directed to method steps which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alia, checking and determining can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process [see MPEP 2106]. Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change "method" to "computer implemented method" in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

b.   Claims 33 – 34 recites a system comprising a device service table and a selection module. These components are software components, i.e., computer program per se. Such claimed matter, which is non-functional descriptive

material per se, is not statutory because it is not a physical "thing" nor a statutory

process as there are not "act" being performed. Such claimed computer

programs do not define any structural and functional interrelationships between

the computer program and other claimed aspects of the invention which permit

the computer's program's functionality to be realized. Since a computer program

itself is not a process, without the computer-readable medium needed to realize

the computer's functionality. In contrast, a claimed computer-readable medium

encoded with a computer program defines structural and functional

interrelationships between the computer program and the medium which permit

the computer program's functionality to be realized, and is thus mandatory. In

Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760. In re Sarkar, 588 F.2d 1330,

1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106 (IV)(B)(1)(a).

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   Claims 1 – 2, 8 – 32 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

c.   The following claim languages are not clearly understood:

i.   As to claim 1, at lines 3 – 6, it is not clearly understood what the

term "sending a service request to a device" means (i.e. sending a

response request to a device). At lines 5 – 6, a device is the device to be

serviced. Therefore, how to make a service request to a device that is to

be serviced. For examination purpose, examiner treats the phrase as

sending a response to the device.

ii.   As to claim 2, it is the dependent claim of claim 1. It is rejected for

the same reason above.

iii.   As to claim 8, at lines 5 – 10, "desired manager" is indefinite. How a

device to be defined as "desired" (available immediately or high speed).

iv.   As to claims 9 – 21, they are the dependent claims of claim 8. They

are rejected for the same reason above.

v.   As to claim 22, at lines 11 - 13, it is not clearly understood what

device manager means (line 13) (i.e. desired manager).

vi.   As to claims 23 – 32, they are the dependent claims of claim 22.

They are rejected for the same reason above.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie, US patent no. 6,515,756 in view of Yanagidaira, US patent no. 6,490,052.

7.   **As to claim 1,** Mastie teaches a method, implemented by a computing device, the method comprising the step of:

determining (determining the type of printer daemon to use,......available in one of the controllers 8a, b, c, col. 5 lines 50 – 60), based at least in part on an amount of time taken to service the device, whether the computing device is to be identified as typically servicing the device.

Mastie does not explicitly teach the step of sending a service request to a device, wherein the service request is a request for data relating to the operation of the device.

Yanagidaira teaches the step of sending a service request to a device, wherein the service request is a request for data relating to the operation of the device (sends the operating and setting states of .... based on request received, col. 5 lines 28 – 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Mastie and Yanagidaira's because Yanagidaira's response would notify the status information of the device so the device can use information to perform necessary functions to be ready for being serviced.

8.   **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Mastie, US patent no. 6,515,756 in view of Yanagidaira, US patent no. 6,490,052,

and in view of Combs, US patent no. 6,766,348.

9.   **As to claim 2**, Mastie and Yanagidaira do not explicitly teach wherein the

determining comprises the step of checking whether the amount of time taken to service

the device is less than a decision threshold; and if the amount of time taken is less than

the decision threshold, then determining that the computing device is to be identified as

typically servicing the device.

Combs teaches the step of wherein the determining comprises the step of the

decision threshold (max wait duration, col. 11 lines 35 – 40).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Mastie, Yanagidaira, and Combs's

system because Combs's threshold would provide a standard waiting time for a service

if the device is not available, and used to determine that the computing device is to be

identified as typically servicing the device if the amount of time taken is less than the

decision threshold.

10.   Claims 3, 5 – 7, and 33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Mastie, US patent no. 6,515,756.

11.   As to claim 3, Mastie teaches the method comprising the steps of:

checking an amount of time taken by a manager device to service another device

(determining the type of printer daemon to use,…printer available in one of the

controllers 8a, b, c, col. 5 lines 50 – 60); and

determining whether the manager device is a desired manager of the other

device (after determining the type …… select a printer, col. 5 lines 50 – 60).

Mastie does not explicitly teach the step of the determining based at least in part

on the amount of time.   However, Mastie teaches selecting the available printer.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to recognize that determining and selecting the available printer

would also comprise determining based part on the amount of time because the amount

of time for the printer ready to service a request is minimum.

12.   As to claim 5, Mastie teaches the step of wherein the manager device was not,

when servicing the other device, the desired manager of the other device (other printer

that is not selected is not the desired manager, col. 5 lines 50 – 60).

13.   **As to claim 6**, Mastie teaches the step of wherein the method is implemented by

the manager device (printer manager 6, col. 5).

14.   **As to claim 7**, Mastie teaches the step of wherein the method is implemented by

a central database (global configuration table, col. 7 lines 58 – 56).

15.   **As to claim 33**, Mastie teaches a system comprising:

a device service table (configuration file, col. 5 lines 45 – 67) to store mappings

of desired managers to managed devices; and

a selection module (printer manager, col. 5 lines 45 – 67 and col. 7 lines 43 – 67)

coupled to access the device service table and configured to, check an amount of time

taken (printer daemon available) by a manager device to service another device, and

determine whether the manager device is a desired manager of the other device

(printer daemon available is the desired manager).

Mastie does not explicitly teach the step of the determining based at least in part

on the amount of time.   However, Mastie teaches selecting the available printer.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to recognize that determining and selecting the available printer

would also be determining based part on the amount of time because the amount of

time for the available printer ready to service a request is minimum.

16.   **Claims 8 – 14, and 17 – 21 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Tierney, US patent no. 4,682,304 in view of Mastie, US patent

no. 6,515,756, and further in view of Combs, US patent no. 6,766,348.

17.   **As to claim 8,** Tierney teaches one or more computer readable media having

stored thereon a plurality of instructions that, when executed by one or more processors

of a device manager, causes the one or more processors to perform acts comprising:

identifying a device to be serviced (table of address which point to the next

available ......outputted to the associated output device, col. 16 lines 9 – 15).

Tierney does not teach the steps of checking whether the device is a desired

manager to be serviced.

Mastie teaches the steps of:

checking whether the device manager is a desired manager for the device

(determining the type of printer daemon to use,...printer available in one of the

controllers 8a, b, c, col. 5 lines 50 – 60);

if the device manager is the desired manager for the device (after determining

the type ...... select a printer, col. 5 lines 50 – 60), then servicing the device (invoke the

selected printer, col. 5 lines 50 - col. 6 lines 8).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Tierney and Mastie's system because

Mastie's ability checking and selecting for the desired manager and servicing the device

would provide a determining and making a decision that the device to be serviced.

Tierney and Mastie do not teaches the step of checking whether a trigger

condition if the device manager is not the desired manager for the device.

Combs teaches the step of checking whether a trigger condition before servicing

the device (max wait duration, col.11 lines 35 – 40).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Tierney, Mastie, and Combs's system

because Combs's trigger condition would provide a flexibility for making the decision

that would wait for the device supposed to be serviced is not immediately available to

service.

18.   **As to claim 9**, Tierney teaches the step of wherein identifying the device to be

serviced comprises selecting the device from a table accessible to the device manager

(table, col. 16 lines 9 – 15).

19.   **As to claim 10**, Tierney teaches the step of wherein identifying the device to be serviced comprises receiving an indication (point to next, col. 16 lines 9 – 15) of the device from a central database.

20.   **As to claim 11**, Tierney teaches the step of wherein the plurality of instructions further cause the one or more processors to perform acts comprising updating a last service time for the device (the oldest .... Devices, col. 16 lines 10 – 15).

21.   **As to claim 12**, Tierney and Mastie modified by Combs teach the step of wherein checking whether a time taken by the device manager to service the device is less than a decision threshold (Combs; max wait duration, col.11 lines 35 – 40); and if the time taken is less than the decision threshold, then identifying the device manager as the desired manager for the device.

22.   **As to claim 13**, see rejection for claim 9 above.

23.   **As to claim 14**, Combs teaches the step of wherein the decision threshold ((max

wait duration, col.11 lines 35 – 40) is equal to the amount of time taken by the last

desired manager of the device to service the device.

24.   **As to claim 17**, see rejection for claim 13 above.

25.   **As to claims 18 and 19**, Tierney and Mastie modified by Combs teach the step

of wherein checking whether the trigger condition is satisfied comprises: generating a

value (max wait duration, col. 11 lines 35 – 40); determining whether the value is within

a range of trigger values; and determining that the trigger condition is satisfied if the

value is within the range of trigger values.

26.   **As to claim 20**, Tierney and Mastie do not teach the step of altering the trigger

condition over time.

        It would have been obvious to one of ordinary skill in the art at the time the

invention was made to recognize that condition may be changed as a design choice to

be suitable with the environment.

27.   **As to claim 21**, Tierney modified by Mastie teach the step of wherein the

plurality of instructions further cause the one or more processors to perform acts

comprising servicing the device only if the device is due for service (it is one of the

decisions).

28.   **Claim 4, 22, 24 – 26, 29 – 32, and 34 are rejected under 35 U.S.C. 103(a) as**

being unpatentable over Mastie, US patent no. 6,515,756 in view of Combs, US

patent no. 6,766,348.

29.   **As to claim 4**, Mastie does not explicitly teach wherein the determining

comprises the step of checking whether the amount of time taken to service the device

is less than a decision threshold; and if the amount of time taken is less than the

decision threshold, then determining that the computing device is to be identified as

typically servicing the device.

Combs teaches the step of wherein the determining comprises the step of the

decision threshold (max wait duration, col. 11 lines 35 – 40).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Mastie, and Combs's system because

Combs's threshold would provide a standard waiting time for a service if the device is

not available, and used to determine that the computing device is to be identified as

typically servicing the device if the amount of time taken is less than the decision threshold.

30.   **As to claim 22**, Mastie teaches one or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computing device, causes the one or more processors to perform acts comprising:

Receiving a request for an identification of device information (printer manager 6 access configuration file to identify the print attributes, col. 5 lines 45 – 65 and col. 7 lines 42 – 67);

Identifying one or more devices for which the device manager is the desired manager (determining the type of printer daemon to use,…printer available in one of the controllers 8a, b, c, col. 5 lines 50 – 60);

for a plurality of additional devices for which the device manager is not the desired manager (check all printers to find the available one);

Mastie do not teach the step of checking whether a trigger condition is satisfied and for each device for which the device manager is not the desired manager and for which the trigger condition is satisfied, identifying the device to the device manager.

However, Mastie teaches the step of the device manager has the ability to identify the desired manager in all devices that would include not desired managers.

Combs teaches the step of checking whether a trigger condition before servicing the device (max wait duration, col.11 lines 35 – 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Mastie and Combs's system because Combs's trigger condition would provide the flexibility for making the decision to select possible desired managers to be reserved for service.

31.   **As to claim 24**, Mastie modified by Combs teach the step of wherein checking whether a time taken by the device manager to service the device is less than a decision threshold (Combs; max wait duration, col.11 lines 35 – 40); and if the time taken is less than the decision threshold, then identifying the device manager as the desired manager for the device.

32.   **As to claim 25**, Mastie teaches the step of wherein the method is implemented by the manager device (printer manager 6, col. 5).

33.   **As to claim 26**, Combs teaches the step of wherein the decision threshold (max wait duration, col.11 lines 35 – 40) is equal to the amount of time taken by the last desired manager of the device to service the device.

34.   **As to claims 29 and 30**, Mastie modified by Combs teach the step of wherein

checking whether the trigger condition is satisfied comprises: generating a value

(Combs; max wait duration, col. 11 lines 35 – 40); determining whether the value is

within a range of trigger values (Combs; max wait duration, col. 11 lines 35 – 40); and

determining that the trigger condition is satisfied if the value is within the range of trigger

values.

35.   **As to claim 31**, Mastie teach the step of wherein the plurality of instructions

further cause the one or more processors to perform acts comprising servicing the

device only if the device is due for service (it is one of the decisions).

36.   **As to claim 32**, see rejection for claim 21 above.

37.   **As to claim 34**, see rejection for claim 4 above.

38.   **Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Mastie, US patent no. 6,515,756 in view of Combs, US patent no. 6,766,348, and in

view of Yanagidaira, US patent no. 6,490,052.

39.   **As to claim 23**, Mastie and Combs do not teach the step comprising of:

receiving, from the device manager, an indication that at least one of the identified

devices has been serviced; and updating a last service time for each of the identified

devices.

Yanagidaira teaches the step of receiving, from the device manager, an

indication that at least one of the identified devices has been serviced; and updating a

last service time for each of the identified devices (printer information about printer

operation including the time is updated with reference to the printer information

database, col. 9 lines 25 – 40).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Mastie, Combs, and Yanagidaira's

system because Yanagidaira's updating information would allow the device manager to

accurately select the device to be serviced.

Allowable Subject Matter

40.   Claims 15, 16, 27, and 28 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

41.   The prior art made of record but not relied upon request is considered to be

pertinent to applicant's disclosure.

Chiarabini, Pub. No. US2002/0026379, demonstrating a method and apparatus

for automated on-line printing service.

Matsuo, US patent no. 6,775,729, demonstrating a method for a peripheral

device to connect to an information processing device.

42.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Phuong N. Hoang whose telephone number is

(571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to

5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571)272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

MENG-AI T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100